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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,039

06/22/2005

Patrick Jeff Crowley

70192

8693

26748

7590

05/14/2008

SYNGENTA CROP PROTECTION, INC.
PATENT AND TRADEMARK DEPARTMENT
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GREENSBORO, NC 27409

EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,039

Applicant(s)

CROWLEY ET AL.

Examiner/Venkataraman
Balasubramanian/**Art Unit**

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008 and 18 February 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) 14 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 and 15-23 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Applicants' amendment with the addition of new claim 17 filed on 2/11/2008 and the supplemental amendment filed on 2/18/2008 with the amendment to claim 17 and addition of new claims 18-23, are made of record. Claims 1-23 are in the application. Of which claim 14 was withdrawn from consideration in the previous office action as drawn to non-elected subject matter. Accordingly claims 1-13 and 15-23 are under consideration. In view of applicants response, the following 103 rejection made in the previous office action is now applied to currently active claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-13 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaper et al., US 5,821,244.

Schaper et al., teaches several condensed heterocyclic compounds of formula Ic as fungicides. See column 1, formula Ic and note the definition of various variable groups, A, B, D, E, X, Y and Q. Note the choices of A, B, D and E include nitrogen and carbon. Note with when Y is a bond, X is NR, with a given Q choice and other variables the compounds recited in the formula include instant compounds. See column 2-8 for various preferred embodiments and column 19-30 for various compounds made.

Schaper differs from instant claims in not permitting pyridine-1,2,4-triazine by limiting the choices of A, B, D and E to include maximum of two nitrogens.

However, given the fact that each of the A, B, D, E can have nitrogen as a choice and still show fungicide activity is clearly indicative of the equivalency of these positions.

Hence, one trained in the art would be motivated to make all the possible combinations of A, B, D, E choices for the said ring including the 1,2,4, triazine core and expect these compounds to have fungicidal activity in view of the equivalency outlined above. See *In re KSR International Co. v. Teleflex Inc.*, 550 US-, 82USPQ2D 1385, 2007.

This rejection is same as made in the previous office action but now includes newly added claims 17-23. Applicants' traversal to overcome this rejection is not persuasive.

As acknowledged by the applicants, Schaper teaches choices of A, B, D and E to include maximum of two nitrogens in the ABDE ring. Thus, the bicyclic core can be isomeric diazines orthofused to pyridine rings and pyridine orthofused to pyridine ring. In addition, in formula Ia, Schaper teaches benzofused pyridine compounds. All these compounds were useful as fungicides. The only choices not recited for the ABDE ring are a tetrazine, two isomeric 1,2,3-triazines and two isomeric 1,2,4-triazines. Thus, there are only five additional choices. As noted above, Schaper shows that the position of the nitrogen in the ABDE ring does not alter the activity of these compounds as fungicides. Thus, there is teaching as Schaper exemplifies several compounds with two of A, B, D,E as nitrogens, with the suggestion position of nitrogen is not critical as any of A, B, D, E can be nitrogen and thereby provide the motivation to one trained in the art that remaining variables A, B, D, E of core of the ring ABDE would also be active.

Also see KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727 (2007), wherein the court stated that

[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

Such is the case with instant claims. Schaper et al., teaches generically a finite number of choices for A, B, D, E and exemplifies large number of compounds. Hence, one trained in the art would be motivated to make compounds wherein the A, B, D, E ring is various isomeric diazines, isomeric triazines and tetrazine. Such compounds including instant 1,2,4-triazines are within the skill set and technical grasp of one trained in the art.

Hence, one trained in the art would be motivated to make variously trisubstituted 1,2,4-triazine permitted by the reference and expect these compounds have the use taught for the exemplified compounds.

Hence, this rejection is proper and is maintained.

Election/Restrictions

This application contains claim 14 is drawn to an invention nonelected with traverse in the reply filed on 8/2/2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

/Venkataraman Balasubramanian/

Primary Examiner, Art Unit 1624

